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FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS' ENTERED AT
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L1 8462 S PYRUVATE (A) CARBOXYLASE?
L2 251716 S LYSINE
L3 6837 S "C. GLUTAMICUM" OR "CORYNEBACTERIUM GLUTAMICUM"
L4 459 S L1 AND L2
L5 298 S L3 AND L4
L6 6255940 S CLON? OR EXPRESS? OR RECOMBINANT
L7 252 S L5 AND L6
L8 4088644 S MUTANT OR DERIVATIVE?
L9 76 S L7 AND L8
L10 64 DUP REM L9 (12 DUPLICATES REMOVED)
 E SINSKEY A J/AU
L11 753 S E3
 E LESSARD P A/AU
L12 81 S E3
 E WILLIS L B/AU
L13 31 S E3
L14 802 S L11 OR L12 OR L13
L15 1 S L10 AND L14

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=> s pyruvate (a) carboxylase?
L1 8462 PYRUVATE (A) CARBOXYLASE?

=> s lysine
L2 251716 LYSINE

=> s "c. glutamicum" or "corynebacterium glutamicum"
L3 6837 "C. GLUTAMICUM" OR "CORYNEBACTERIUM GLUTAMICUM"

=> s l1 and l2
L4 459 L1 AND L2

=> s l3 and l4
L5 298 L3 AND L4

=> s clon? or express? or recombinant
3 FILES SEARCHED...
L6 6255940 CLON? OR EXPRESS? OR RECOMBINANT

=> s l5 and l6
L7 252 L5 AND L6

=> s mutant or derivative?
L8 4088644 MUTANT OR DERIVATIVE?

=> s l7 and l8
L9 76 L7 AND L8

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10 64 DUP REM L9 (12 DUPLICATES REMOVED)

=> d 1-64 ibib

L10 ANSWER 1 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

DUPLICATE 1

ACCESSION NUMBER: 2004-08783 BIOTECHDS
TITLE: Producing L-lysine by fermenting L-lysine
producing coryneform bacteria sensitive to
4-hydroxydiaminopimelate, adding L-lysine in
medium/bacterial cell, optionally isolating L-lysine
/L-lysine-containing feedstuff additive;
involving Corynebacterium glutamicum
fermentation

AUTHOR: BATHE B; REYNEN C; PFEFFERLE W
 PATENT ASSIGNEE: DEGUSSA AG
 PATENT INFO: WO 2004013340 12 Feb 2004
 APPLICATION INFO: WO 2003-EP7475 10 Jul 2003
 PRIORITY INFO: DE 2002-1035029 31 Jul 2002; DE 2002-1035029 31 Jul 2002
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 OTHER SOURCE: WPI: 2004-157137 [15]

L10 ANSWER 2 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2004:120993 HCAPLUS
 DOCUMENT NUMBER: 140:162440
 TITLE: Production of L-lysine using
Corynebacterium glutamicum
 mutants resistant to diaminopimelic acid
 analogs
 INVENTOR(S): Bathe, Brigitte; Hans, Stephan; Pfefferle, Walter
 PATENT ASSIGNEE(S): Degussa AG, Germany
 SOURCE: PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2004013341 | A1 | 20040212 | WO 2003-EP7474 | 20030710 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10235028 | A1 | 20040219 | DE 2002-10235028 | 20020731 |
| US 2004067562 | A1 | 20040408 | US 2003-630740 | 20030731 |
| PRIORITY APPLN. INFO.: | | | DE 2002-10235028 | A 20020731 |
| | | | US 2002-401751P | P 20020808 |

L10 ANSWER 3 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
 ACCESSION NUMBER: 2003-12754 BIOTECHDS
 TITLE: Fermentative preparation of L-amino acids, by fermenting
 coryneform bacteria in which gene coding for trehalose
 phosphatase, maltooligosyl-trehalose synthase and/or
 maltooligosyl-trehalose trehalohydrolase is attenuated;
 vector-mediated gene transfer and expression in
 host cell for strain improvement and L-amino acid
 preparation

AUTHOR: WOLF A; SCHISCHKA N; HERMANN T; MORBACH S; KRAEMER R
 PATENT ASSIGNEE: DEGUSSA AG
 PATENT INFO: WO 2003014370 20 Feb 2003
 APPLICATION INFO: WO 2002-EP5264 14 May 2002
 PRIORITY INFO: DE 2001-1039062 9 Aug 2001; DE 2001-1039062 9 Aug 2001
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 OTHER SOURCE: WPI: 2003-278482 [27]

L10 ANSWER 4 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
 ACCESSION NUMBER: 2004-07909 BIOTECHDS

TITLE: New isolated polynucleotide encoding L-amino acids from coryneform bacteria, useful in human medicine and the pharmaceuticals industry, and particularly in animal nutrition;
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: MOCKEL B; MARX A; PFEFFERLE W

PATENT ASSIGNEE: MOCKEL B; MARX A; PFEFFERLE W

PATENT INFO: US 2003166173 4 Sep 2003

APPLICATION INFO: US 2002-139520 7 May 2002

PRIORITY INFO: US 2002-139520 7 May 2002; US 2000-585642 2 Jun 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2004-080335 [08]

L10 ANSWER 5 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-25369 BIOTECHDS

TITLE: Preparing L-lysine or L-threonine by the fermentation of coryneform bacteria comprises fragmenting L-lysine or L-threonine producing bacteria where the endogenous gene that codes for transketolase (tkt) is over-expressed;
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: BURKE K; DUNICAN L K; DUNCAN R; MCCORMACK A; STAPLETON C; MOCKEL B; THIERBACH G

PATENT ASSIGNEE: BURKE K; DUNICAN L K; DUNCAN R; MCCORMACK A; STAPLETON C; MOCKEL B; THIERBACH G

PATENT INFO: US 2003109014 12 Jun 2003

APPLICATION INFO: US 2002-143856 14 May 2002

PRIORITY INFO: US 2002-143856 14 May 2002; US 2000-528196 17 Mar 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2003-708775 [67]

L10 ANSWER 6 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-21758 BIOTECHDS

TITLE: Preparation of L-amino acids, especially lysine, useful e.g. in animal nutrition, comprises fermentation of coryneform bacteria with reduced activity of transport proteins;
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: FARWICK M; BATHE B; BREHME J; SCHISCHKA N; PFEFFERLE W

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: DE 10163167 3 Jul 2003

APPLICATION INFO: DE 2001-1063167 21 Dec 2001

PRIORITY INFO: DE 2001-1063167 21 Dec 2001; DE 2001-1063167 21 Dec 2001

DOCUMENT TYPE: Patent

LANGUAGE: German

OTHER SOURCE: WPI: 2003-588873 [56]

L10 ANSWER 7 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-21755 BIOTECHDS

TITLE: Preparation of L-amino acids, especially lysine, useful e.g. in animal nutrition, comprises fermentation of coryneform bacteria with reduced activity of C4-dicarboxylate transport protein;
vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation

AUTHOR: BREHME J; SCHISCHKA N; MARX A
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10162650 3 Jul 2003
APPLICATION INFO: DE 2001-1062650 20 Dec 2001
PRIORITY INFO: DE 2001-1062650 20 Dec 2001; DE 2001-1062650 20 Dec 2001
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2003-588853 [56]

L10 ANSWER 8 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on STN

ACCESSION NUMBER: 2003:600337 SCISEARCH

THE GENUINE ARTICLE: 699XM

TITLE: Role of the *Bacillus methanolicus* citrate synthase II gene, *citY*, in regulating the secretion of glutamate in L-lysine-secreting mutants

AUTHOR: Brautaset T; Williams M D; Dillingham R D; Kaufmann C; Bennaars A; Crabbe E; Flickinger M C (Reprint)

CORPORATE SOURCE: Univ Minnesota, Inst Biotechnol, St Paul, MN 55108 USA (Reprint); Univ Minnesota, Dept Biochem Mol Biol & Biophys, St Paul, MN 55108 USA; Norwegian Univ Sci & Technol, Dept Biotechnol, N-7491 Trondheim, Norway

COUNTRY OF AUTHOR: USA; Norway

SOURCE: APPLIED AND ENVIRONMENTAL MICROBIOLOGY, (JUL 2003) Vol. 69, No. 7, pp. 3986-3995.

Publisher: AMER SOC MICROBIOLOGY, 1752 N ST NW, WASHINGTON, DC 20036-2904 USA.

ISSN: 0099-2240.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 56

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 9 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 2

ACCESSION NUMBER: 2002-16323 BIOTECHDS

TITLE: Novel mutated, feedback resistant pyruvate carboxylase enzyme polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine, L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine; plasmid-mediated recombinant enzyme gene transfer and expression in *Corynebacterium* sp.

AUTHOR: HANKE P D

PATENT ASSIGNEE: ARCHER-DANIELS MIDLAND CO

PATENT INFO: WO 2002031158 18 Apr 2002

APPLICATION INFO: WO 2000-US31893 13 Oct 2000

PRIORITY INFO: US 2000-239913 13 Oct 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-463267 [49]

L10 ANSWER 10 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 3

ACCESSION NUMBER: 2002-13028 BIOTECHDS

TITLE: New protein kinase B, pknB gene from corynebacteria, useful as hybridization probe and overexpression of which gene in corynebacteria is useful for producing L-amino acids, in particular L-lysine;

Corynebacterium sp. protein-kinase gene for use as a DNA probe or in production of L-lysine

AUTHOR: BATHE B; HANS S; FARWICK M; HERMANN T

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002022828 21 Mar 2002

APPLICATION INFO: WO 2000-EP10211 12 Sep 2000

PRIORITY INFO: DE 2001-1020095 25 Apr 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-351892 [38]

L10 ANSWER 11 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-13587 BIOTECHDS
TITLE: New polynucleotide from coryneform bacteria coding for dep67 gene, where overexpression of the gene provides improved production of L-amino acids particularly L-lysine in *corynebacterium glutamicum*; plasmid vector-mediated recombinant protein gene transfer and expression in *Escherichia coli*, DNA primer, polymerase chain reaction, DNA microarray, DNA chip, DNA probe and fermentation for use in L-amino acid and L-lysine preparation

AUTHOR: FARWICK M; HUTHMACHER K; HERMANN T; BATHE B; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002027000 4 Apr 2002
APPLICATION INFO: WO 2000-EP10942 27 Sep 2000
PRIORITY INFO: DE 2000-1047866 27 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-394241 [42]

L10 ANSWER 12 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-13335 BIOTECHDS
TITLE: Polynucleotides from Coryneform bacteria, coding for the enzymatic cobalt reducing gene product cobW, involved in the biosynthesis of L-amino acids (e.g. L-lysine); plasmid pCR2.1cobWint-mediated *Corynebacterium glutamicum* protein gene transfer and expression in bacterium for enzyme expression reduction and enhancement for amino acid production

AUTHOR: FARWICK M; HUTHMACHER K; SCHISCHKA N; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002026992 4 Apr 2002
APPLICATION INFO: WO 2000-EP8989 27 Sep 2000
PRIORITY INFO: DE 2001-1017815 10 Apr 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-372127 [40]

L10 ANSWER 13 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-13342 BIOTECHDS
TITLE: New dead gene encoding polypeptide having activity of DNA/RNA helicase, useful in bacteria for the fermentative preparation of L-amino acids, particularly L-lysine, from glucose, molasses, starch, cellulose or ethanol; vector-mediated gene transfer and expression in *Escherichia coli*, glucose, sucrose, lactose, fructose, molasses, starch, cellulose, glycerol and ethanol fermentation and DNA microarray for use in L-lysine and L-amino-acid preparation

AUTHOR: FARWICK M; HUTHMACHER K; BREHME J; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002026787 4 Apr 2002
APPLICATION INFO: WO 2000-EP10772 27 Sep 2000
PRIORITY INFO: DE 2000-1047865 27 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-394238 [42]

L10 ANSWER 14 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-13341 BIOTECHDS

TITLE: New truB gene encoding polypeptide having activity of tRNA pseudouridine 55 synthase, useful in bacteria for fermentative preparation of L-amino acids, particularly L-lysine, from glucose, molasses, starch or ethanol; vector-mediated gene transfer and expression in Escherichia coli, glucose, sucrose, lactose, fructose, molasses, starch, cellulose, glycerol and ethanol fermentation, DNA microarray and DNA chip for use in L-lysine and L-amino-acid preparation

AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; BATHE B

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002026786 4 Apr 2002

APPLICATION INFO: WO 2000-EP10771 27 Sep 2000

PRIORITY INFO: DE 2000-1047864 27 Sep 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-394237 [42]

L10 ANSWER 15 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-15776 BIOTECHDS

TITLE: Novel polynucleotide from Coryneform bacteria coding for PPGK gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription activator ppgK;

recombinant Corynebacterium

glutamicum production useful for L-amino acid production, especially L-lysine production

AUTHOR: BATHE B; MARTENS M; HERMANN T

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002026755 4 Apr 2002

APPLICATION INFO: WO 2000-EP9784 26 Sep 2000

PRIORITY INFO: DE 2000-1047403 26 Sep 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-444014 [47]

L10 ANSWER 16 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-13374 BIOTECHDS

TITLE: New isolated deformylase polypeptide encoding polynucleotide from coryneform bacteria which when present in attenuated form in L-lysine producing bacteria, results in increased fermentative production of L-lysine;

recombinant enzyme gene, vector expression in host cell, fermentation for L-amino acid production

AUTHOR: FARWICK M; HUTHMACHER K; BREHME J; PFEFFERLE W

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002024922 28 Mar 2002

APPLICATION INFO: WO 2000-EP8602 19 Sep 2000

PRIORITY INFO: DE 2001-1013957 22 Mar 2001

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-394142 [42]

L10 ANSWER 17 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-13337 BIOTECHDS

TITLE: Polynucleotide sequence encoding ndkA gene useful for preparation of L-amino acids e.g. L-lysine, and as hybridization probes for discovering RNA, cDNA and DNA to isolate genes encoding nucleotide diphosphate kinase; plasmid vector-mediated dihydrodipicolinate-synthase gene transfer and expression in Escherichia coli and

DNA microarray and DNA chip for use in L-lysine
and L-amino-acid preparation

AUTHOR: BATHE B; BASTUCK C; MARX A; HERMANN T
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002024880 28 Mar 2002
APPLICATION INFO: WO 2000-EP10527 20 Sep 2000
PRIORITY INFO: DE 2000-1046625 20 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-394133 [42]

L10 ANSWER 18 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12659 BIOTECHDS

TITLE: New ccsB gene of coryneform bacteria, useful when
overexpressed for increasing fermentative production of
L-amino acids, encodes a cytochrome c synthesis protein;
vector-mediated gene transfer and **expression** in
host cell for strain improvement and L-amino acid
preparation

AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; BATHE B; HERMANN T
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002022672 21 Mar 2002
APPLICATION INFO: WO 2000-EP9457 14 Sep 2000
PRIORITY INFO: DE 2000-1045487 14 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-329948 [36]

L10 ANSWER 19 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-12658 BIOTECHDS
TITLE: New pstC2 gene of coryneform bacteria, useful when suppressed
for increasing fermentative production of L-amino acids,
encodes a membrane-bound phosphate transporter protein;
vector-mediated gene transfer and **expression** in
host cell for strain improvement and L-amino acid
preparation

AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; BREHME J
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002022671 21 Mar 2002
APPLICATION INFO: WO 2000-EP9455 14 Sep 2000
PRIORITY INFO: DE 2000-1045486 14 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-329947 [36]

L10 ANSWER 20 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-12657 BIOTECHDS
TITLE: New sugA gene of coryneform bacteria, useful when suppressed
for increasing fermentative production of L-amino acids,
encodes a sugar transporter protein;
vector-mediated gene transfer and **expression** in
host cell for strain improvement and L-amino acid
preparation

AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; HERMANN T; MARX A
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002022669 21 Mar 2002
APPLICATION INFO: WO 2000-EP9164 14 Sep 2000
PRIORITY INFO: DE 2001-1008839 23 Feb 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-329946 [36]

L10 ANSWER 21 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12656 BIOTECHDS

TITLE: New gorA gene of coryneform bacteria, useful when suppressed for increasing fermentative production of L-amino acids, encodes a glutathione reductase; vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; MARX A

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002022666 21 Mar 2002

APPLICATION INFO: WO 2000-EP9314 12 Sep 2000

PRIORITY INFO: DE 2001-1009023 24 Feb 2001

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-329945 [36]

L10 ANSWER 22 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-13089 BIOTECHDS

TITLE: New Atr61 gene of Coryneform bacteria, useful when overexpressed, for increasing fermentative production of L-amino acids, encodes an ABC transporter protein; vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation

AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002022633 21 Mar 2002

APPLICATION INFO: WO 2000-EP10522 15 Sep 2000

PRIORITY INFO: DE 2000-1045579 15 Sep 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-362328 [39]

L10 ANSWER 23 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-16222 BIOTECHDS

TITLE: Novel sahH gene from coryneform bacteria useful as probe to isolate genes coding for adenosyl homocysteinase, and overexpression of which gene in coryneform bacteria is useful for producing amino acids, e.g. L-lysine; plasmid-mediated enzyme gene transfer and expression in *Corynebacterium glutamicum* for L-methionine production

AUTHOR: FARWICK M; HUTHMACHER K; BREHME J; PFEFFERLE W; BINDER M; GREISSINGER D; THIERBACH G

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002020806 14 Mar 2002

APPLICATION INFO: WO 2000-EP8222 9 Sep 2000

PRIORITY INFO: DE 2001-1009685 28 Feb 2001

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-463087 [49]

L10 ANSWER 24 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-13086 BIOTECHDS

TITLE: Novel polynucleotide from Coryneform bacteria coding for hisC2 gene, useful as hybridization probe for detecting DNA to isolate nucleic acids, polynucleotides or genes coding for transcription regulator hisC2; vector-mediated gene transfer, expression in host cell and DNA probe for strain improvement, L-amino acid preparation, DNA microarray or DNA chip construction and RNA, cDNA or DNA detection

AUTHOR: FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: WO 2002020771 14 Mar 2002

APPLICATION INFO: WO 2000-EP9037 9 Sep 2000
PRIORITY INFO: DE 2001-1008838 23 Feb 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-351778 [38]

L10 ANSWER 25 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-11965 BIOTECHDS
TITLE: New polynucleotides isolated from coryneform bacteria coding
for the clpC gene and a process for the fermentative
preparation of amino acids using bacteria in which the clpC
gene is attenuated;
vector-mediated gene transfer and **expression** in
Corynebacterium glutamicum host cell for
strain improvement and L-amino acid preparation
AUTHOR: FARWICK M; HUTHMACHER K; BATHE B; RIEPING M; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002020574 14 Mar 2002
APPLICATION INFO: WO 2000-EP9970 9 Sep 2000
PRIORITY INFO: DE 2001-1036987 28 Jul 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-281238 [32]

L10 ANSWER 26 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-11964 BIOTECHDS
TITLE: New polynucleotides isolated from coryneform bacteria coding
for the gpmB gene and a process for the fermentative
preparation of amino acids using bacteria in which the gpmB
gene is enhanced;
vector-mediated gene transfer and **expression** in
Corynebacterium glutamicum host cell for
strain improvement and L-amino acid preparation
AUTHOR: BATHE B; SCHROEDER I; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002020573 14 Mar 2002
APPLICATION INFO: WO 2000-EP9453 9 Sep 2000
PRIORITY INFO: DE 2001-1033668 11 Jul 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-281237 [32]

L10 ANSWER 27 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12572 BIOTECHDS
TITLE: New sigM gene from coryneform bacteria useful as probe to
isolate genes which code for sigma factor M, and
overexpression of which gene in coryneform bacteria is useful
for producing amino acids, especially L-lysine;
L-amino acid production by **Corynebacterium**
glutamicum fermentation
AUTHOR: BATHE B; BASTUCK C; FARWICK M; HERMANN T; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002018599 7 Mar 2002
APPLICATION INFO: WO 2000-EP9972 2 Sep 2000
PRIORITY INFO: DE 2001-1036984 28 Jul 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-315544 [35]

L10 ANSWER 28 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12571 BIOTECHDS
TITLE: New sigH gene from coryneform bacteria useful as a probe to
isolate genes which code for sigma factor H, and
overexpression of which gene in coryneform bacteria is useful

for producing amino acids, especially L-lysine;
L-amino acid production by **Corynebacterium**
glutamicum fermentation
AUTHOR: BATHE B; SCHROEDER I; RIEPING M; MARX A; FARWICK M; PFEFFERLE W; HERMANN T
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002018598 7 Mar 2002
APPLICATION INFO: WO 2000-EP9250 2 Sep 2000
PRIORITY INFO: DE 2001-1033427 10 Jul 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-315543 [35]

L10 ANSWER 29 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12570 BIOTECHDS

TITLE: New citB gene from coryneform bacteria useful as a probe to isolate genes which code for the CitB protein, and attenuation of which gene in coryneform bacteria is useful for producing amino acids, in particular L-lysine;
L-amino acid production by fermentation of bacterium expressing the transcription regulator citB protein

AUTHOR: MOECKEL B; HERMANN T; FARWICK M; PFEFFERLE W; MARX A
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002018596 7 Mar 2002
APPLICATION INFO: WO 2000-EP8387 31 Aug 2000
PRIORITY INFO: DE 2001-1008841 23 Feb 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-315542 [35]

L10 ANSWER 30 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12653 BIOTECHDS

TITLE: New polynucleotide sequence encoding the sigC gene useful for preparation of L-amino acids e.g. lysine, and as hybridization probes for discovering RNA, cDNA and DNA to isolate genes which code for sigma factor C;
L-amino acid production by fermentation of bacterium containing the sigma factor-C gene

AUTHOR: BATHE B; HANS S; FARWICK M; HERMANN T; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002018589 7 Mar 2002
APPLICATION INFO: WO 2000-EP9163 2 Sep 2000
PRIORITY INFO: DE 2001-1033426 10 Jul 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-315541 [35]

L10 ANSWER 31 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-12966 BIOTECHDS

TITLE: Novel isolated cita encoding polynucleotide from coryneform bacteria, useful as a probe, and which, when present in attenuated form in L-lysine producing bacteria, results in increased fermentative production of L-lysine;
vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation

AUTHOR: MOECKEL B; FARWICK M; HERMANN T; MARX A; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2002018427 7 Mar 2002
APPLICATION INFO: WO 2000-EP7766 31 Aug 2000
PRIORITY INFO: DE 2001-1008463 22 Feb 2001
DOCUMENT TYPE: Patent

LANGUAGE: English
OTHER SOURCE: WPI: 2002-362170 [39]

L10 ANSWER 32 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-06013 BIOTECHDS

TITLE: New coryneform bacteria gene for subunit beta of RNA polymerase B, useful when overexpressed for increasing fermentative production of amino acids, also its **mutants**;
vector-mediated recombinant protein gene transfer and **expression** in host cell for use in food and as a food-additive

AUTHOR: MOECKEL B; BATHE B; HERMANN T; PFEFFERLE W; BINDER M

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: EP 1239040 11 Sep 2002

APPLICATION INFO: EP 2002-2501 2 Feb 2002

PRIORITY INFO: DE 2001-1062387 19 Dec 2001; DE 2001-1007229 16 Feb 2001

DOCUMENT TYPE: Patent

LANGUAGE: German

OTHER SOURCE: WPI: 2003-048323 [05]

L10 ANSWER 33 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-19152 BIOTECHDS

TITLE: Novel Coryneform bacteria polynucleotide sequence of ilvE gene which codes for transaminase E, the **expression** of which is enhanced, particularly over **expressed**, for fermentative preparation of L-leucine, L-valine; recombinant transaminase-E production and gene transfer for strain improvement for L-leucine and L-valine production by fermentation

AUTHOR: BATHE B; BASTUCK C; TAUCH A; MCHARDY A

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: EP 1217069 26 Jun 2002

APPLICATION INFO: EP 2000-128596 20 Dec 2000

PRIORITY INFO: DE 2000-1063314 20 Dec 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-550406 [59]

L10 ANSWER 34 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-14541 BIOTECHDS

TITLE: New L-lactate dehydrogenase gene from coryneform bacteria, useful, when overexpressed, for increasing fermentative production of L-amino acid; vector-mediated gene transfer and **expression** in host cell for strain improvement and L-lysine preparation

AUTHOR: FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W

PATENT ASSIGNEE: DEGUSSA AG

PATENT INFO: EP 1186657 13 Mar 2002

APPLICATION INFO: EP 2000-117811 9 Sep 2000

PRIORITY INFO: DE 2000-1044681 9 Sep 2000

DOCUMENT TYPE: Patent

LANGUAGE: German

OTHER SOURCE: WPI: 2002-282882 [33]

L10 ANSWER 35 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-04181 BIOTECHDS

TITLE: New nucleic acid encoding ribosomal protein 12 of coryneform bacteria, useful, when overexpressed, for increasing fermentative amino acid synthesis;

vector-mediated gene transfer and **expression** in host cell for strain improvement and L-lysine preparation

AUTHOR: MOECKEL B; BATHE B; HANS S; KREUTZER C; HERMANN T; PFEFFERLE W; BINDER M
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10162386 29 Aug 2002
APPLICATION INFO: DE 2001-1062386 19 Dec 2001
PRIORITY INFO: DE 2001-1007230 16 Feb 2001; DE 2001-1007230 16 Feb 2001
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-714722 [78]

L10 ANSWER 36 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-16465 BIOTECHDS
TITLE: New cysD, N, K, E and H genes from coryneform bacteria, useful, when over **expressed**, for increasing fermentative production of L-amino acids;
vector plasmid pEC-XK99E-mediated **recombinant** protein gene transfer and **expression** in Escherichia coli for use in L-amino acid preparation and medicine, pharmaceutical and food industries
AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; SCHISCHKA N; BATHE B
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10136986 21 Mar 2002
APPLICATION INFO: DE 2000-1036986 3 Sep 2000
PRIORITY INFO: DE 2001-1009691 28 Feb 2001
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-373165 [41]

L10 ANSWER 37 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-16464 BIOTECHDS
TITLE: RodA genes from coryneform bacteria, useful, when overexpressed, for increasing fermentative production of L-amino acid, especially L-**lysine**;
vector plasmid pEC-XK99E-mediated **recombinant** protein gene transfer and **expression** in Escherichia coli for use in L-amino acid preparation and medicine, pharmaceutical and food industries
AUTHOR: FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10132947 21 Mar 2002
APPLICATION INFO: DE 2000-1032947 12 Sep 2000
PRIORITY INFO: DE 2000-1044943 12 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-373156 [41]

L10 ANSWER 38 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-16463 BIOTECHDS
TITLE: New ftsX gene from coryneform bacteria, useful, when over **expressed**, for increasing fermentative production of L-amino acid, especially L-**lysine**;
vector plasmid pEC-XK99E-mediated **recombinant** protein gene transfer and **expression** in Escherichia coli for use in L-amino acid preparation, medicine, pharmaceutical and food industries
AUTHOR: FARWICK M; HUTHMACHER K; BREHME J; RIEPING M; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10132176 21 Mar 2002
APPLICATION INFO: DE 2000-1032176 12 Sep 2000
PRIORITY INFO: DE 2000-1044944 12 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-373154 [41]

L10 ANSWER 39 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-06530 BIOTECHDS
TITLE: Improved production of L-amino acids in coryneform bacteria,
useful particularly in animal nutrition, by reducing activity
of malate-quinone oxidoreductase;
mutant bacterium construction for strain
improvement and amino acid preparation
AUTHOR: FARWICK M; BATHE B; HERMANN T; MARX A; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10117816 17 Oct 2002
APPLICATION INFO: DE 2001-1017816 10 Apr 2001
PRIORITY INFO: DE 2001-1017816 10 Apr 2001; DE 2001-1017816 10 Apr 2001
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2003-076643 [08]

L10 ANSWER 40 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-14941 BIOTECHDS
TITLE: New dep34 gene from coryneform bacteria, useful, when
inactivated, for increasing fermentative production of
L-amino acid, especially L-lysine;
plasmid-mediated inactivated mutant gene
transfer and expression in
Corynebacterium glutamicum for use in
food and pharmaceutical industry
AUTHOR: FARWICK M; HUTHMACHER K; HERMANN T; BATHE B; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10112429 21 Mar 2002
APPLICATION INFO: DE 2000-1012429 9 Sep 2000
PRIORITY INFO: DE 2000-1044708 9 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-316816 [36]

L10 ANSWER 41 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-15772 BIOTECHDS
TITLE: New menE gene of coryneform bacteria, useful when suppressed
for increasing fermentative production of L-amino acids,
encodes an O-succinylbenzoic acid CoA-ligase;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-lysine
preparation
AUTHOR: FARWICK M; HUTHMACHER K; PFEFFERLE W; MARX A
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10112106 28 Mar 2002
APPLICATION INFO: DE 2000-1012106 20 Sep 2000
PRIORITY INFO: DE 2000-1046624 20 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-331278 [37]

L10 ANSWER 42 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-01018 BIOTECHDS
TITLE: New trehalose-6-phosphate synthase gene from coryneform
bacteria, useful, when suppressed for increasing fermentative
production of amino acids, especially lysine;
vector-mediated gene transfer and expression in
host cell for strain improvement and amino acid
preparation
AUTHOR: HERMANN T; WOLF A; MORBACH S; KRAEMER R
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10110760 1 Aug 2002
APPLICATION INFO: DE 2001-1010760 7 Mar 2001
PRIORITY INFO: DE 2001-1003873 30 Jan 2001; DE 2001-1003873 30 Jan 2001

DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-600944 [65]

L10 ANSWER 43 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-15771 BIOTECHDS
TITLE: New pepC gene of Coryneform bacteria, useful when suppressed,
for increasing fermentative production of L-amino acids,
encodes an aminopeptidase I;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-lysine
preparation
AUTHOR: FARWICK M; HUTHMACHER K; BATHE B; RIEPING M; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10108828 28 Mar 2002
APPLICATION INFO: DE 2000-1008828 19 Sep 2000
PRIORITY INFO: DE 2000-1046229 19 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-331276 [37]

L10 ANSWER 44 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-15769 BIOTECHDS
TITLE: New dps gene of coryneform bacteria, useful when
overexpressed, for increasing fermentative production of
L-amino acids, encodes a DNA-protection protein;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-lysine
preparation
AUTHOR: BATHE B; KREUTZER C; RIEPING M; MARX A; FARWICK M; PFEFFERLE
W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10046623 28 Mar 2002
APPLICATION INFO: DE 2000-1046623 20 Sep 2000
PRIORITY INFO: DE 2000-1046623 20 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-331127 [37]

L10 ANSWER 45 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-15768 BIOTECHDS
TITLE: New polynucleotide from coryneform bacteria, useful when
overexpressed for increasing fermentative amino acid
production, encodes sigma factor D;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-lysine
preparation
AUTHOR: BATHE B; KREUTZER C; MARTENS M; FARWICK M; HERRMANN T;
PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10043331 14 Mar 2002
APPLICATION INFO: DE 2000-1043331 2 Sep 2000
PRIORITY INFO: DE 2000-1043331 2 Sep 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-316723 [36]

L10 ANSWER 46 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-15767 BIOTECHDS
TITLE: New polynucleotide from coryneform bacteria, useful when
weakened, for increasing fermentative amino acid production,
encodes lipoic acid synthetase;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-lysine

preparation

AUTHOR: MOECKEL B; PFEFFERLE W; BUCHHOLZ M
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10042742 14 Mar 2002
APPLICATION INFO: DE 2000-1042742 31 Aug 2000
PRIORITY INFO: DE 2000-1042742 31 Aug 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-316714 [36]

L10 ANSWER 47 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-15766 BIOTECHDS

TITLE: New polynucleotide from coryneform bacteria, useful, when
weakened, for increasing fermentative amino acid production,
encodes lipoprotein ligase B;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-lysine
preparation

AUTHOR: MOECKEL B; PFEFFERLE W; BUCHHOLZ M
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10042739 14 Mar 2002
APPLICATION INFO: DE 2000-1042739 31 Aug 2000
PRIORITY INFO: DE 2000-1042739 31 Aug 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-316713 [36]

L10 ANSWER 48 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2002-11603 BIOTECHDS

TITLE: New phosphopentose isomerase gene from Coryneform bacteria,
useful for transforming cells for improved fermentative
production of L-amino acids, especially lysine;
vector-mediated gene transfer and expression in
host cell for strain improvement and L-amino acid
preparation

AUTHOR: SCHISCHKA N; MOECKEL B; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: DE 10037612 14 Feb 2002
APPLICATION INFO: DE 2000-1037612 2 Aug 2000
PRIORITY INFO: DE 2000-1037612 2 Aug 2000
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2002-207239 [27]

L10 ANSWER 49 OF 64 HCPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:658267 HCPLUS
DOCUMENT NUMBER: 137:212013
TITLE: Protein and DNA sequence of Corynebacterium ribosomal
protein S12 gene rpsL and its use in amino acid production
with recombinant coryneform bacteria
INVENTOR(S): Moeckel, Bettina; Bathe, Brigitte; Hans, Stephan;
Kreutzer, Caroline; Hermann, Thomas; Pfefferle,
Walter; Binder, Michael
PATENT ASSIGNEE(S): Degussa A.-G., Germany
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2002066651 | A2 | 20020829 | WO 2002-EP573 | 20020122 |

| | | | | |
|------------------------|--|----------|------------------|------------|
| WO 2002066651 | A3 | 20030109 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| DE 10162386 | A1 | 20020829 | DE 2001-10162386 | 20011219 |
| EP 1360298 | A2 | 20031112 | EP 2002-716672 | 20020122 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| BR 2002007284 | A | 20040210 | BR 2002-7284 | 20020122 |
| US 2002155557 | A1 | 20021024 | US 2002-75460 | 20020215 |
| PRIORITY APPLN. INFO.: | | | DE 2001-10107230 | A 20010216 |
| | | | DE 2001-10162386 | A 20011219 |
| | | | WO 2002-EP573 | W 20020122 |

L10 ANSWER 50 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:220795 HCAPLUS
 DOCUMENT NUMBER: 136:261906
 TITLE: Sequences of ptsI gene from corynebacteria and use thereof in production of L-lysine
 INVENTOR(S): Moeckel, Bettina; Hans, Stephan; Schischka, Natalie; Pfefferle, Walter
 PATENT ASSIGNEE(S): Degussa A.-G., Germany
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|--|------------------|-------------|
| WO 2002022827 | A1 | 20020321 | WO 2001-EP10072 | 20010831 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| DE 10045496 | A1 | 20020328 | DE 2000-10045496 | 20000914 |
| AU 2001089858 | A5 | 20020326 | AU 2001-89858 | 20010831 |
| EP 1317549 | A1 | 20030611 | EP 2001-969679 | 20010831 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| US 2002132323 | A1 | 20020919 | US 2001-950788 | 20010913 |
| US 6680187 | B2 | 20040120 | | |
| US 2003198991 | A1 | 20031023 | US 2003-460294 | 20030613 |
| PRIORITY APPLN. INFO.: | | | DE 2000-10045496 | A 20000914 |
| | | | WO 2001-EP10072 | W 20010831 |
| | | | US 2001-950788 | A3 20010913 |
| REFERENCE COUNT: | 3 | THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT | | |

L10 ANSWER 51 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:220607 HCAPLUS
 DOCUMENT NUMBER: 136:261897

TITLE: Sequences of pknD gene from corynebacteria and use
 thereof in production of L-lysine
 INVENTOR(S): Bathe, Brigitte; Schroeder, Indra; Farwick, Mike;
 Hermann, Thomas
 PATENT ASSIGNEE(S): Degussa A.-G., Germany
 SOURCE: PCT Int. Appl., 46 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|------------------|------------|
| WO 2002022632 | A2 | 20020321 | WO 2001-EP10210 | 20010905 |
| WO 2002022632 | A3 | 20020613 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10120094 | A1 | 20020328 | DE 2001-10120094 | 20010425 |
| AU 2001095539 | A5 | 20020326 | AU 2001-95539 | 20010905 |
| EP 1317545 | A2 | 20030611 | EP 2001-976189 | 20010905 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2002039766 | A1 | 20020404 | US 2001-949971 | 20010912 |
| PRIORITY APPLN. INFO.: | | | DE 2000-10044948 | A 20000912 |
| | | | DE 2001-10120094 | A 20010425 |
| | | | US 2001-297266P | P 20010612 |
| | | | WO 2001-EP10210 | W 20010905 |

L10 ANSWER 52 OF 64 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2002:522540 HCAPLUS
 DOCUMENT NUMBER: 137:89444
 TITLE: Use of ptsH gene of *Corynebacterium glutamicum* for L-lysine biosynthesis
 INVENTOR(S): Farwick, Mike; Mockel, Bettina; Pfefferle, Walter
 PATENT ASSIGNEE(S): Germany
 SOURCE: U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S.
 Ser. No. 755,187.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|-------------|
| US 2002090700 | A1 | 20020711 | US 2001-819930 | 20010329 |
| US 2003224499 | A9 | 20031204 | | |
| DE 10001101 | A1 | 20010719 | DE 2000-10001101 | 20000113 |
| US 2002094554 | A1 | 20020718 | US 2001-755187 | 20010108 |
| US 2004005675 | A9 | 20040108 | | |
| PRIORITY APPLN. INFO.: | | | DE 2000-10001101 | A 20000113 |
| | | | US 2000-503189 | B2 20000214 |
| | | | US 2001-755187 | A2 20010108 |

L10 ANSWER 53 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
 ACCESSION NUMBER: 2002-05524 BIOTECHDS

TITLE: A novel methodology employing *Corynebacterium glutamicum* genome information to generate a new L-lysine-producing mutant;
vector expression in bacterium useful for producing industrial L-lysine and strain improvement

AUTHOR: OHNISHI J; MITSUHASHI S; HAYASHI M; ANDO S; YOKOI H; OCHIAI K; IKEDA M

CORPORATE SOURCE: Kyowa Hakko Kogyo Co Ltd

LOCATION: Ikeda M, Kyowa Hakko Kogyo Co Ltd, Tokyo Res Labs, Tokyo 1948533, Japan

SOURCE: APPLIED MICROBIOLOGY AND BIOTECHNOLOGY; (2002) 58, 2, 217-223
ISSN: 0175-7598

DOCUMENT TYPE: Journal

LANGUAGE: English

L10 ANSWER 54 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN

ACCESSION NUMBER: 2002:215722 SCISEARCH

THE GENUINE ARTICLE: 526RD

TITLE: A novel methodology employing *Corynebacterium glutamicum* genome information to generate a new L-lysine-producing mutant

AUTHOR: Ohnishi J; Mitsuhashi S; Hayashi M; Ando S; Yokoi H; Ochiai K; Ikeda M (Reprint)

CORPORATE SOURCE: Kyowa Hakko Kogyo Co Ltd, Tokyo Res Labs, Tokyo 1948533, Japan (Reprint)

COUNTRY OF AUTHOR: Japan

SOURCE: APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (FEB 2002) Vol. 58, No. 2, pp. 217-223.

Publisher: SPRINGER-VERLAG, 175 FIFTH AVE, NEW YORK, NY 10010 USA.

ISSN: 0175-7598.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 30

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 55 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 4

ACCESSION NUMBER: 2001-12912 BIOTECHDS

TITLE: Novel polynucleotides;

recombinant protein gene production,
computer-based system and vector expression in host useful for point mutation detection and bioinformatics

AUTHOR: Nakagawa S; Mizoguchi H; Ando S; Hayashi M; Ochiai K; Yokoi H; Tateishi N; Senoh A; Ikeda M; Ozaki A

PATENT ASSIGNEE: Kyowa-Hakko

LOCATION: Tokyo, Japan.

PATENT INFO: EP 1108790 20 Jun 2001

APPLICATION INFO: EP 2000-127688 18 Dec 2000

PRIORITY INFO: JP 2000-280988 3 Aug 2000; JP 1999-377484 16 Dec 1999

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2001-376931 [40]

L10 ANSWER 56 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-09727 BIOTECHDS

TITLE: New polynucleotides encoding glbO gene, useful as a primer for producing DNA of genes which code for the gene product of glbO, or as hybridization probes;
vector-mediated gene transfer, expression in host cell, DNA probe and DNA primer for strain improvement

AUTHOR: MOECKEL B; MARX A; PFEFFERLE W
PATENT ASSIGNEE: DEGUSSA AG
PATENT INFO: WO 2001094569 13 Dec 2001
APPLICATION INFO: WO 2000-EP4792 2 Jun 2000
PRIORITY INFO: US 2001-813932 22 Mar 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-171481 [22]

L10 ANSWER 57 OF 64 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2001-10798 BIOTECHDS

TITLE: Production of L-lysine for human medicine and animal nutrition;
incomplete csp1 gene transfer to *Corynebacterium glutamicum* via electroporation using plasmid pK18mobsacB-DCsp1

AUTHOR: Moeckel B; Pfefferle W; Brand S; Puehler A; Kalinowski J; Bathe B
PATENT ASSIGNEE: Dugussa-Huels
LOCATION: Frankfurt, Germany.
PATENT INFO: DE 19953809 10 May 2001
APPLICATION INFO: DE 1999-1053809 9 Nov 1999
PRIORITY INFO: DE 1999-1053809 9 Nov 1999
DOCUMENT TYPE: Patent
LANGUAGE: German
OTHER SOURCE: WPI: 2001-309421 [33]

L10 ANSWER 58 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN

ACCESSION NUMBER: 2001:691073 SCISEARCH
THE GENUINE ARTICLE: 466AH
TITLE: Characterization of the phosphoenolpyruvate carboxykinase gene from *Corynebacterium glutamicum* and significance of the enzyme for growth and amino acid production
AUTHOR: Riedel C; Rittmann D; Dangel P; Mockel B; Petersen S; Sahm H; Eikmanns B J (Reprint)
CORPORATE SOURCE: Univ Ulm, Dept Microbiol & Biotechnol, D-89069 Ulm, Germany (Reprint); KFA Jülich GmbH, Forschungszentrum, Inst Biotechnol 1, D-52425 Jülich, Germany; Degussa, Abt FA FE B, D-33790 Halle Saale, Germany
COUNTRY OF AUTHOR: Germany
SOURCE: JOURNAL OF MOLECULAR MICROBIOLOGY AND BIOTECHNOLOGY, (OCT 2001) Vol. 3, No. 4, pp. 573-583.
Publisher: HORIZON SCIENTIFIC PRESS, PO BOX 1, NORFOLK, WYMONDHAM NR18 0JA, ENGLAND.
ISSN: 1464-1801.
DOCUMENT TYPE: Article; Journal
LANGUAGE: English
REFERENCE COUNT: 51

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 59 OF 64 MEDLINE on STN DUPLICATE 5
ACCESSION NUMBER: 2001483537 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11321586
TITLE: Pyruvate carboxylase is a major bottleneck for glutamate and lysine production by *Corynebacterium glutamicum*.
AUTHOR: Peters-Wendisch P G; Schiel B; Wendisch V F; Katsoulidis E; Mockel B; Sahm H; Eikmanns B J
CORPORATE SOURCE: Dept Microbiology and Biotechnology, University of Ulm, Germany.
SOURCE: Journal of molecular microbiology and biotechnology, (2001 Apr) 3 (2) 295-300.

PUB. COUNTRY: Journal code: 100892561. ISSN: 1464-1801.
England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-Y09548
ENTRY MONTH: 200108
ENTRY DATE: Entered STN: 20010903
Last Updated on STN: 20010903
Entered Medline: 20010830

L10 ANSWER 60 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN

ACCESSION NUMBER: 2000:193325 SCISEARCH

THE GENUINE ARTICLE: 289XN

TITLE: Metabolic flux distributions in *Corynebacterium glutamicum* during growth and lysine overproduction (Reprinted from Biotechnology and Bioengineering, vol 41, pg 633-646, 1993)

AUTHOR: Vallino J J (Reprint); Stephanopoulos G
SOURCE: BIOTECHNOLOGY AND BIOENGINEERING, (20 MAR 2000) Vol. 67, No. 6, pp. 872-885.

Publisher: JOHN WILEY & SONS INC, 605 THIRD AVE, NEW YORK, NY 10158-0012.

ISSN: 0006-3592.

DOCUMENT TYPE: Reprint; Journal

FILE SEGMENT: LIFE; AGRI

LANGUAGE: English

REFERENCE COUNT: 89

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 61 OF 64 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN DUPLICATE 6

ACCESSION NUMBER: 97147233 EMBASE

DOCUMENT NUMBER: 1997147233

TITLE: Pyruvate carboxylase as an anaplerotic enzyme in *Corynebacterium glutamicum*.

AUTHOR: Peters-Wendisch P.G.; Wendisch V.F.; Paul S.; Eikmanns B.J.; Sahm H.

CORPORATE SOURCE: B.J. Eikmanns, Institut fur Biotechnologie, Forschungszentrum Julich, D-52425 Julich, Germany.

b.eikmanns@kfa-juelich.de

SOURCE: Microbiology, (1997) 143/4 (1095-1103).

Refs: 46

ISSN: 1350-0872 CODEN: MROBEO

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology

029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

L10 ANSWER 62 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN

ACCESSION NUMBER: 96:540057 SCISEARCH

THE GENUINE ARTICLE: UX143

TITLE: C-3-CARBOXYLATION AS AN ANAPLEROTIC REACTION IN PHOSPHOENOLPYRUVATE CARBOXYLASE-DEFICIENT *CORYNEBACTERIUM-GLUTAMICUM*

AUTHOR: PETERSWENDISCH P G; WENDISCH V F; DEGRAAF A A; EIKMANNS B J (Reprint); SAHM H

CORPORATE SOURCE: KFA JULICH GMBH, FORSCHUNGSZENTRUM, INST BIOTECHNOL 1, D-52425 JULICH, GERMANY (Reprint); KFA JULICH GMBH, FORSCHUNGSZENTRUM, INST BIOTECHNOL 1, D-52425 JULICH,

COUNTRY OF AUTHOR: GERMANY
SOURCE: GERMANY ARCHIVES OF MICROBIOLOGY, (JUN 1996) Vol. 165, No. 6, pp. 387-396.
ISSN: 0302-8933.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 46
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 63 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN
ACCESSION NUMBER: 94:177461 SCISEARCH
THE GENUINE ARTICLE: MZ715
TITLE: EFFECTS OF PHOSPHOENOL PYRUVATE-CARBOXYLASE DEFICIENCY ON METABOLISM AND LYSINE PRODUCTION IN CORYNEBACTERIUM-GLUTAMICUM
AUTHOR: GUBLER M (Reprint); PARK S M; JETTEN M; STEPHANOPOULOS G; SINSKEY A J
CORPORATE SOURCE: HOFFMANN LA ROCHE AG, CH-4002 BASEL, SWITZERLAND (Reprint); MIT, DEPT BIOL, CAMBRIDGE, MA, 02139; MIT, DEPT CHEM ENGN, CAMBRIDGE, MA, 02139
COUNTRY OF AUTHOR: SWITZERLAND; USA
SOURCE: APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (FEB 1994) Vol. 40, No. 6, pp. 857-863.
ISSN: 0175-7598.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; AGRI
LANGUAGE: ENGLISH
REFERENCE COUNT: 33
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L10 ANSWER 64 OF 64 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
on STN
ACCESSION NUMBER: 93:116039 SCISEARCH
THE GENUINE ARTICLE: KM970
TITLE: METABOLIC FLUX DISTRIBUTIONS IN CORYNEBACTERIUM-GLUTAMICUM DURING GROWTH AND LYSINE OVERPRODUCTION
AUTHOR: VALLINO J J; STEPHANOPOULOS G (Reprint)
CORPORATE SOURCE: MIT, DEPT CHEM ENGN, CAMBRIDGE, MA, 02139
COUNTRY OF AUTHOR: USA
SOURCE: BIOTECHNOLOGY AND BIOENGINEERING, (15 MAR 1993) Vol. 41, No. 6, pp. 633-646.
ISSN: 0006-3592.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; AGRI
LANGUAGE: ENGLISH
REFERENCE COUNT: 89
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

=> e sinskey a j/au
E1 2 SINSKE S A/AU
E2 15 SINSKEY A/AU
E3 753 --> SINSKEY A J/AU
E4 1 SINSKEY A L/AU
E5 7 SINSKEY AJ/AU
E6 10 SINSKEY ANTHONY/AU
E7 254 SINSKEY ANTHONY J/AU
E8 2 SINSKEY ANTHONY JOHN/AU
E9 2 SINSKEY ANTHONY S/AU

E10 1 SINSKEY ANTONY J/AU
E11 1 SINSKEY G N STEPHANOPOULOS AND A J/AU
E12 1 SINSKEY P E/AU

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L11 753 "SINSKEY A J"/AU

=> e lessard p a/au
E1 1 LESSARD OSCAR J/AU
E2 223 LESSARD P/AU
E3 81 --> LESSARD P A/AU
E4 3 LESSARD P C/AU
E5 11 LESSARD P D/AU
E6 4 LESSARD P N/AU
E7 1 LESSARD P R/AU
E8 6 LESSARD PA/AU
E9 27 LESSARD PAUL/AU
E10 2 LESSARD PAUL C/AU
E11 1 LESSARD PAUL CHRISTIAN/AU
E12 4 LESSARD PETER D/AU

=> s e3
L12 81 "LESSARD P A"/AU

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E1 37 WILLIS L A/AU
E2 2 WILLIS L A M/AU
E3 31 --> WILLIS L B/AU
E4 9 WILLIS L C/AU
E5 14 WILLIS L D/AU
E6 8 WILLIS L E/AU
E7 89 WILLIS L G/AU
E8 1 WILLIS L H/AU
E9 1 WILLIS L I/AU
E10 19 WILLIS L J/AU
E11 13 WILLIS L K/AU
E12 16 WILLIS L L/AU

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L13 31 "WILLIS L B"/AU

=> d his

(FILE 'HOME' ENTERED AT 14:22:11 ON 25 OCT 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCPLUS' ENTERED AT
14:22:40 ON 25 OCT 2004

L1 8462 S PYRUVATE (A)CARBOXYLASE?
L2 251716 S LYSINE
L3 6837 S "C. GLUTAMICUM" OR "CORYNEBACTERIUM GLUTAMICUM"
L4 459 S L1 AND L2
L5 298 S L3 AND L4
L6 6255940 S CLON? OR EXPRESS? OR RECOMBINANT
L7 252 S L5 AND L6
L8 4088644 S MUTANT OR DERIVATIVE?
L9 76 S L7 AND L8
L10 64 DUP REM L9 (12 DUPLICATES REMOVED)
E SINSKEY A J/AU
L11 753 S E3
E LESSARD P A/AU
L12 81 S E3
E WILLIS L B/AU
L13 31 S E3

=> s l11 or l12 or l13
L14 802 L11 OR L12 OR L13

=> s l10 and l14
L15 1 L10 AND L14

=> d all

L15 ANSWER 1 OF 1 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation. on
STN
AN 94:177461 SCISEARCH
GA The Genuine Article (R) Number: MZ715
TI EFFECTS OF PHOSPHOENOL PYRUVATE-CARBOXYLASE DEFICIENCY
ON METABOLISM AND LYSINE PRODUCTION IN CORYNEBACTERIUM
-GLUTAMICUM
AU GUBLER M (Reprint); PARK S M; JETTEN M; STEPHANOPOULOS G; SINSKEY A
J
CS HOFFMANN LA ROCHE AG, CH-4002 BASEL, SWITZERLAND (Reprint); MIT, DEPT
BIOL, CAMBRIDGE, MA, 02139; MIT, DEPT CHEM ENGN, CAMBRIDGE, MA, 02139
CYA SWITZERLAND; USA
SO APPLIED MICROBIOLOGY AND BIOTECHNOLOGY, (FEB 1994) Vol. 40, No. 6, pp.
857-863.
ISSN: 0175-7598.
DT Article; Journal
FS LIFE; AGRI
LA ENGLISH
REC Reference Count: 33
AB The phosphoenol **pyruvate carboxylase** gene (ppc) of
lysine-producing *Corynebacterium glutamicum*
and *C. lactofermentum* strains was inactivated by marker exchange
mutagenesis. The **mutants** lacked completely phosphoenol
pyruvate carboxylase (PEP carboxylase) activity, but
grew in minimal medium containing glucose as the sole carbon source. In
addition, the ppc(-) strains produced equivalent titers of **lysine**
in shake flasks and in 10-l fermentation experiments as their parent
strains. To address the question of how ppc(-) *Corynebacterium* strains
generate oxaloacetate (OAA) for their own metabolism as well as for
high-level **lysine** production, we measured the activities of
enzymes leading to OAA synthesis. Whereas **pyruvate**
carboxylase activity was not detected in any of the strains,
phosphoenol pyruvate carboxykinase (PEP carboxykinase) activity was found
to be significantly higher in *C. glutamicum* ppc
mutants compared to the parent strains. On the other hand, PEP
carboxykinase activity in *C. lactofermentum* was essentially absent. As
glyoxylate cycle enzymes are strongly repressed by glucose, they are not
likely to compensate for the lack of PEP carboxylase activity. PEP
carboxykinase, among several candidates, could play this role.
CC BIOTECHNOLOGY & APPLIED MICROBIOLOGY
STP KeyWords Plus (R): BREVIBACTERIUM-FLAVUM; ESCHERICHIA-COLI;
NUCLEOTIDE-SEQUENCE; MOLECULAR-CLONING; GENE; MUTANTS;
RESISTANT; BIOSYNTHESIS; EXPRESSION; BACTERIUM
RF 92-4812 001; PUTATIVE ANAEROBIC COPROPORPHYRINOGEN-III OXIDASE IN
RHODOBACTER-SPHAEROIDES; TRANSCRIPTIONAL REGULATORY ELEMENT; FUNCTIONAL
EXPRESSION
RE Referenced Author | Year | VOL | PG | Referenced Work
(RAU) | (RPY) | (RVL) | (RPG) | (RWK)
=====+=====+=====+=====+=====+=====+
COOMES M W 1985 | 164 | 646 | J BACTERIOL
CREMER J 1991 | 57 | 1746 | APPL ENVIRON MICROB
DIXON G H 1959 | 72 | P 3 | BIOCHEM J
EIKMANNS B J 1989 | 218 | 330 | MOL GEN GENET
HANAHAN D 1983 | 166 | 557 | J MOL BIOL
JAGER W 1992 | 174 | 5462 | J BACTERIOL

| | | | | |
|-----------------|------|-----|------|----------------------|
| JETTEN M S M | 1993 | 111 | 183 | FEMS MICROBIOL LETT |
| KINOSHITA S | 1985 | | 115 | BIOL IND MICROORGANI |
| KINOSHITA S | 1978 | 2 | 209 | ECON MICROBIOL |
| LIEBL W | 1989 | 32 | 205 | APPL MICROBIOL BIOT |
| MARTIN J F | 1989 | | 25 | MICROBIAL PRODUCTS N |
| MEDINA V | 1990 | 172 | 7151 | J BACTERIOL |
| MORI M | 1985 | 98 | 1621 | J BIOCHEM-TOKYO |
| NAKATANI Y | 1972 | 49 | 225 | ANAL BIOCHEM |
| OREGAN M | 1989 | 77 | 237 | GENE |
| OZAKI H | 1983 | 47 | 1569 | AGR BIOL CHEM TOKYO |
| OZAKI H | 1968 | 64 | 355 | J BIOCH |
| OZAKI H | 1969 | 66 | 297 | J BIOCH |
| RIDDLES P W | 1979 | 94 | 75 | ANAL BIOCHEM |
| SAMBROOK J | 1989 | | | MOL CLONING LABORATO |
| SANO K | 1987 | 51 | 597 | AGR BIOL CHEM TOKYO |
| SANO K | 1970 | 16 | 373 | J GEN APPL MICROBIOL |
| SCHAFER A | 1990 | 172 | 1663 | J BACTERIOL |
| SCHRUMPF B | 1992 | 37 | 566 | APPL MICROBIOL BIOT |
| SCHWARZER A | 1991 | 9 | 84 | BIO-TECHNOL |
| SHII O I | 1990 | 54 | 3275 | AGR BIOL CHEM TOKYO |
| SHII O I | 1978 | 84 | 647 | J BIOCH |
| TOMIOKA N | 1981 | 184 | 359 | MOL GEN GENET |
| TOSAKA O | 1979 | 43 | 1513 | AGR BIOL CHEM TOKYO |
| VALLINO J J | 1992 | 41 | 633 | BIOTECHNOL BIOENG |
| VANDEROSTEN C H | 1989 | 11 | 11 | BIOTECHNOL LETT |
| YOKOTA A | 1988 | 52 | 455 | AGR BIOL CHEM TOKYO |
| YOSHIHAMA M | 1985 | 162 | 591 | J BACTERIOL |

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(FILE 'HOME' ENTERED AT 14:22:11 ON 25 OCT 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCPLUS' ENTERED AT
14:22:40 ON 25 OCT 2004

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L1      8462 S PYRUVATE (A)CARBOXYLASE?
L2      251716 S LYSINE
L3      6837 S "C. GLUTAMICUM" OR "CORYNEBACTERIUM GLUTAMICUM"
L4      459 S L1 AND L2
L5      298 S L3 AND L4
L6      6255940 S CLON? OR EXPRESS? OR RECOMBINANT
L7      252 S L5 AND L6
L8      4088644 S MUTANT OR DERIVATIVE?
L9      76 S L7 AND L8
L10     64 DUP REM L9 (12 DUPLICATES REMOVED)
          E SINSKEY A J/AU
L11     753 S E3
          E LESSARD P A/AU
L12     81 S E3
          E WILLIS L B/AU
L13     31 S E3
L14     802 S L11 OR L12 OR L13
L15     1 S L10 AND L14

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| | Issue Date | Pages | Document ID | Title |
|---|-------------------|--------------|--------------------|---|
| 1 | 20030508 | 53 | US 20030087381 A1 | Metabolically engineered organisms for enhanced production of oxaloacetate-derived biochemicals |
| 2 | 20030206 | 29 | US 20030027305 A1 | Pyruvate carboxylase from <i>Corynebacterium glutamicum</i> |
| 3 | 20021128 | 21 | US 20020177202 A1 | Feedback-resistant pyruvate carboxylase gene from <i>corynebacterium</i> |
| 4 | 20040224 | 258 | US 6696561 B1 | <i>Corynebacterium glutamicum</i> genes encoding proteins involved in membrane synthesis and membrane transport |
| 5 | 20020924 | 32 | US 6455284 B1 | Metabolically engineered <i>E. coli</i> for enhanced production of oxaloacetate-derived biochemicals |
| 6 | 20020611 | 29 | US 6403351 B1 | Pyruvate carboxylase polypeptide from <i>Corynebacterium glutamicum</i> |
| 7 | 20010109 | 29 | US 6171833 B1 | Pyruvate carboxylase from <i>corynebacterium glutamicum</i> |
| 8 | 19921229 | 12 | US 5175108 A | Plasmids from <i>corynebacterium glutamicum</i> and plasmid vectors derived therefrom |

| | Issue Date | Pages | Document ID | Title |
|---|-------------------|--------------|-------------------------|---|
| 1 | 20030508 | 7 | US
20030087400
A1 | Process for the fermentative production of L-lysine using coryneform bacteria |
| 2 | 20030206 | 29 | US
20030027305
A1 | Pyruvate carboxylase from <i>Corynebacterium glutamicum</i> |
| 3 | 20040224 | 258 | US 6696561
B1 | <i>Corynebacterium glutamicum</i> genes encoding proteins involved in membrane synthesis and membrane transport |
| 4 | 20020611 | 29 | US 6403351
B1 | Pyruvate carboxylase polypeptide from <i>Corynebacterium glutamicum</i> |
| 5 | 20010109 | 29 | US 6171833
B1 | Pyruvate carboxylase from <i>corynebacterium glutamicum</i> |
| 6 | 19980616 | 41 | US 5766925
A | Method of producing L-lysine |

| | L # | Hits | Search Text |
|----|-----|-------------|--|
| 1 | L1 | 805 | pyruvate adj
carboxylase |
| 2 | L2 | 35744
48 | mak\$3 or manufactur\$3
or synthes\$3 or
produc\$3 |
| 3 | L3 | 830 | corynebacterium adj
glutamicum |
| 4 | L4 | 917 | glutamicum |
| 5 | L5 | 917 | 13 or 14 |
| 6 | L6 | 166 | 11 same 12 |
| 7 | L7 | 66305 | lysine |
| 8 | L8 | 36 | 16 same 17 |
| 9 | L9 | 8 | 15 same 18 |
| 10 | L10 | 25178 | SINSKEY LESSARD
WILLIS |
| 11 | L11 | 6 | 18 and 110 |